UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/465,600	12/17/1999	ALEX I. EYDELBERG	INTL-0304-US	9073

7590 11/01/2005	**EXAMINER**
TIMOTHY N TROP	HA, LEYNNA A
TROP PRUNER HU & MILES PC	

ART UNIT	PAPER NUMBER
2135	

TROP PRUNER HU & MILES PC
8554 KATY FREEWAY
STE 100
HOUSTON, TX 77024

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *31-37,39-41,43-51,53 and 55-63* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *31-37, 39-41, 43-51, 53, and 55-63* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 31-37, 39-41, 43-51, 53, and 55-63 have been amended

with the Request for Continuation Examination filed on 8/22/2005.

Claim Rejections - 35 USC § 103

· The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made to a
> person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   *Claims 31-37, 39-41, 43-51, 53, and 55-63 are rejected under*

35 U.S.C. 103(a) as being unpatentable by Rakavy, et. Al. (US

6,324,644) in view of Anderson (US 6,161,177) and Godse (US

6,202,091) and in further view of Kuznetsov, et al. (US 5,483,649).

As per claim 31:

Rakavy teach having more than one BIOS with the ability to detect and

load the network BIOS [see col.6, lines 35-60].   However, Rakavy fails to

discuss loading either a first module of the basic input/output system or a second module of the basic input/output system based on a system state.

Anderson teaches a computer system that includes a memory device containing a BIOS program and BIOS identifying data specifying the CPU corresponding to the BIOS program. Further, Anderson teaches determining if the correct BIOS has been selected for execution by the CPU (col.4, lines 41-43 and col.5, lines 22-30). It would have been obvious of the ordinary skill in the art to combine the teachings of Rakavy with Anderson of being able to selectively load the first or second BIOS is to ensure that the proper BIOS program is executed in computer systems having more than one BIOS program retained in a storage device and this will add optimum performance (col.2, lines 45-63).

However, the Rakavy & Anderson combination fails to include selectively load the bios based on the system state indicating a connection to the network.

Godse teach a pointer that can be selectively set to point toward a local site or a remote site that allows initiating the boot-up procedure locally while loading some software component such as a network wherein the component that are selected to load (col.2, lines 40-49 and col.4, lines 30-53). It would have been obvious of the ordinary skill in the art to combine the teachings of the Rakavy & Anderson combination with Godse of being able to selectively load the BIOS based on the system

state indicating a connection to a network because this avoids the necessity of changing the boot-up program at each node of the network (col.2, lines 49-50).

However, the combinations of Rekavy, Anderson, and Godse did not include requesting the first level of authentication information or a second level of authentication information from a user based on the system state.

Kuznetsov, et al. teaches a file protection subsystem is interfaced with the personal computer system to monitor the security of requests where the only permitted access path is using the BIOS (col.5, lines 53-60) and there includes a program that checks requests at the BIOS level (col.6, lines 20-22). Kuznetsov disclose the protection initialization program that identifies the personal computer user and the BIOS-level request check program checks for a match between the current request and the set of dangerous request at the BIOS level thereby prevents the servicing of dangerous requests (col.7, lines 40-48 and col.9, lines 32-35). Hence, by requesting a safe authentication level, the PRM switches to a passive operating mode and based on the system state where an attempt to use the hard disk controller when the PRM is in the active mode will result in the removal of the CPU availability (col.7, lines 50-58). It would have been obvious for a person of ordinary skills in the art at the time of the invention to combine the teachings of the Rakavy & Anderson & Godse combination with Kuznetsov of requesting the first

level of second level of authentication information from a user based on

the system state wherein includes the BIOS-level request check program

to prevent servicing of dangerous requests.

As per claim 32:

Rakavy, et al. discloses a method of claim 1 further comprising:

storing said first module of a basic input/output system on a first

storage device prior to execution; **[see col.6, lines 45-56]**

storing said second module of the basic input/output system on a

second storage device prior to execution; and **[see col.5, lines 47-51]**

enabling said second module to be executed conditionally

depending on a state. **[see col.7, lines 13-26 and col.8, lines 7-29]**

As per claim 33: see Rekavy on FIGs.1 and 7; discussing storing said

second module includes storing said second module in a storage

associated with a network server accessible to said system over the

network.

As per claim 34: see Rekavy on col.9, lines 23- 43; discussing

detecting whether or not the system is connected to the network during a

boot sequence.

As per claim 35: see Rekavy on col.7, lines 25-33 and col.8, lines 1-

6; discusses dynamically linking to one of a plurality of modules, and

exporting and offset to an entry point in one module to another module.

As per claim 36: see Rekavy on col. 8, lines 7-29; discusses storing a

secondary entry point in a module to locate a function within the

module.

As per claim 37: see Rekavy on col.15, lines 26-43 and FIG.3A;

discusses developing a segment address for said second module at run

time.

As per claim 38: Cancelled.

As per claim 39: see Rekavy on col.5, lines 40-55 and col.9, lines

43-56; discusses authenticating a user according to one of multiple

levels based upon the system state, and obtaining a key from a protected

storage if the user is authenticated.

As per claim 40:

Rakavy teach having more than one BIOS with the ability to detect and

load the network BIOS [see col.6, lines 35-60]. However, Rakavy fails to

discuss loading either a first module of the basic input/output system or

a second module of the basic input/output system based on a system

state.

Anderson teaches a computer system that includes a memory

device containing a BIOS program and BIOS identifying data specifying

the CPU corresponding to the BIOS program. Further, Anderson teaches

determining if the correct BIOS has been selected for execution by the

CPU (col.4, lines 41-43 and col.5, lines 22-30). It would have been

obvious of the ordinary skill in the art to combine the teachings of

Rakavy with Anderson of being able to selectively load the first or second BIOS is to ensure that the proper BIOS program is executed in computer systems having more than one BIOS program retained in a storage device and this will add optimum performance (col.2, lines 45-63).

However, the Rakavy & Anderson combination fails to include selectively load the bios based on the system state indicating a connection to the network.

Godse teach a pointer that can be selectively set to point toward a local site or a remote site that allows initiating the boot-up procedure locally while loading some software component such as a network wherein the component that are selected to load (col.2, lines 40-49 and col.4, lines 30-53). It would have been obvious of the ordinary skill in the art to combine the teachings of the Rakavy & Anderson combination with Godse of being able to selectively load the BIOS based on the system state indicating a connection to a network because this avoids the necessity of changing the boot-up program at each node of the network (col.2, lines 49-50).

Kuznetsov, et al. teaches a file protection subsystem is interfaced with the personal computer system to monitor the security of requests where the only permitted access path is using the BIOS (col.5, lines 53-60) and there includes a program that checks requests at the BIOS level (col.6, lines 20-22). Kuznetsov disclose the protection initialization program that identifies the personal computer user and the BIOS-level

request check program checks for a match between the current request and the set of dangerous request at the BIOS level thereby prevents the servicing of dangerous requests (col.7, lines 40-48 and col.9, lines 32-35). Hence, by requesting a safe authentication level, the PRM switches to a passive operating mode and based on the system state where an attempt to use the hard disk controller when the PRM is in the active mode will result in the removal of the CPU availability (col.7, lines 50-58).

It would have been obvious for a person of ordinary skills in the art at the time of the invention to combine the teachings of the Rakavy & Anderson & Godse combination with Kuznetsov of requesting the first level of second level of authentication information from a user based on the system state wherein includes the BIOS-level request check program to prevent servicing of dangerous requests.

As per claim 41:

Rakavy, et al. discloses a method of claim 1 further comprising:

access said first module of a basic input/output system on a first storage device; **[see col.6, lines 45-56]**

access said second module of the basic input/output system on a second storage device; and **[see col.5, lines 47-51]**

execute said second module conditionally depending on a state. **[see col.7, lines 13-26 and col.8, lines 7-29]**

As per claim 42: Cancelled.

As per claim 43: see Rekavy on col.7, lines 13-26 and col.8, lines 7-29; discusses storing instructions that cause a system to execute said second module conditionally depending on whether or not the system is coupled to the network.

As per claim 44: see Rekavy on col.13, line 40 thru col.14, line 49; discusses storing instructions that cause a system to selectively access either a first module setting forth a first authentication protocol in the first storage device or a second module setting forth a second authentication protocol in the second storage device based on the system state.

As per claim 45: see col.5, lines 40-55 and col.9, lines 43-56; discusses storing instructions that cause a system to obtain a key from a protected storage if a user is authenticated.

As per claim 46: see Rekavy on col.7, lines 25-33 and col.8, lines 1-6; discusses storing instructions that cause a system to dynamically link said first and second modules.

As per claim 47: see Rekavy on col.9, lines 23- 43; discusses storing instructions that cause a system to detect whether the system is connected to the network during a boot sequence.

As per claim 48: see Rekavy on col.7, lines 25-33 and col.8, lines 1-6; discusses storing instructions that cause a system to dynamically link to one of a plurality of modules using offsets to entry points in said modules.

As per claim 49: see Rekavy on col.7, lines 25-33 and col.8, lines 1-6; discusses storing instructions that cause a system to store a secondary entry point in a module to locate a function within the module.

As per claim 50: See Rekavy on col.15, lines 26-43 and FIG.3A; discusses storing instructions that cause a system to develop a segment address for said second module at run time.

As per claim 51:

Rakavy discloses system comprising:

a first basic input/output system module executable by a processor; and **[see col.5, lines 46-48 and col.6, lines 24-63]**

a second basic input/output system module executable by said processor; and **[see col.12, line 56 thru col.13, line 2 and col.15, lines 3-13]**

However, Rakavy fails to discuss loading either a first module of the basic input/output system or a second module of the basic input/output system based on a system state.

Anderson teaches a computer system that includes a memory device containing a BIOS program and BIOS identifying data specifying the CPU corresponding to the BIOS program. Further, Anderson teaches determining if the correct BIOS has been selected for execution by the CPU (col.4, lines 41-43 and col.5, lines 22-30). It would have been obvious of the ordinary skill in the art to combine the teachings of

Rakavy with Anderson of being able to selectively load the first or second
BIOS is to ensure that the proper BIOS program is executed in computer
systems having more than one BIOS program retained in a storage device
and this will add optimum performance (col.2, lines 45-63).

However, the Rakavy & Anderson combination fails to include
selectively load the bios based on the system state indicating a
connection to the network.

Godse teach a pointer that can be selectively set to point toward a
local site or a remote site that allows initiating the boot-up procedure
locally while loading some software component such as a network
wherein the component that are selected to load (col.2, lines 40-49 and
col.4, lines 30-53). It would have been obvious of the ordinary skill in
the art to combine the teachings of the Rakavy & Anderson combination
with Godse of being able to selectively load the BIOS based on the system
state indicating a connection to a network because this avoids the
necessity of changing the boot-up program at each node of the network
(col.2, lines 49-50).

Kuznetsov, et al. teaches a file protection subsystem is interfaced
with the personal computer system to monitor the security of requests
where the only permitted access path is using the BIOS (col.5, lines 53-
60) and there includes a program that checks requests at the BIOS level
(col.6, lines 20-22). Kuznetsov disclose the protection initialization
program that identifies the personal computer user and the BIOS-level

request check program checks for a match between the current request and the set of dangerous request at the BIOS level thereby prevents the servicing of dangerous requests (col.7, lines 40-48 and col.9, lines 32-35). Hence, by requesting a safe authentication level, the PRM switches to a passive operating mode and based on the system state where an attempt to use the hard disk controller when the PRM is in the active mode will result in the removal of the CPU availability (col.7, lines 50-58).

It would have been obvious for a person of ordinary skills in the art at the time of the invention to combine the teachings of the Rakavy & Anderson & Godse combination with Kuznetsov of requesting the first level or second level of authentication information from a user based on the system state wherein includes the BIOS-level request check program to prevent servicing of dangerous requests.

As per claim 52: Cancelled.

As per claim 53: see Rekavy on col.5, lines 47-65 and col.7, lines 23-31 and Anderson on col.5, lines 22-30; discusses a third basic input/output module stored in a third storage, said third storage being coupled to said system over the network.

As per claim 54: Cancelled.

As per claim 55: see Rekavy on col.9, lines 43-62 and col.13, lines 26-63; discusses first and second basic input/output module modules include different authentication protocols.

As per claim 56: see Rekavy on col.13, line 40 thru col.14, line 49; discusses processor to execute said second basic input/output system module to implement a network authentication protocol.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained

from the Patent Application Information Retrieval (PAIR) system. Status

information for published applications may be obtained from either

Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more

information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact

the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LHa

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100